

**IN THE CLAIMS:**

Please amend the claims as indicated. A complete set of the claims is included below, as well as the current status of each claim. This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-25 (cancelled)

Claim 26 (previously presented): A method for detecting code phase and carrier frequency in a GPS signal comprising:

- a. collecting a multiple millisecond portion of a GPS signal in a GPS receiver;
- b. performing a coarse acquisition of a carrier frequency and code phase of the GPS signal using non-coherent processing, wherein said non-coherent processing includes:
  - i. partitioning the multiple millisecond portion of the GPS signal into one millisecond segments, converting each one millisecond segment to the frequency domain;
  - ii. multiplying each of the converted millisecond segments by a frequency representation of a Gold code corresponding to a GPS satellite in view of the GPS receiver to generate a product;
  - iii. converting each product to the time domain to obtain a correlation signal between each millisecond segment and the Gold code; and
  - iv. determining a location of a peak in each correlation signal; and
- c. performing a fine acquisition of said carrier frequency and code phase of the GPS signal using coherent processing.

Claim 27 (previously presented): The method of claim 26, wherein said performing a fine acquisition comprises using a curve fitting routine to refine the location of the peak.

Claim 28 (previously presented): The method of claim 26, wherein said performing a fine acquisition comprises using a table lookup method.

Claim 29 (previously presented): The method of claim 26, wherein said performing a fine acquisition comprises analyzing complex values at locations of said determined peaks.

Claim 30 (previously presented): The method of claim 29, wherein said performing a fine acquisition comprises analyzing complex values of said determined peaks and a few points on either side of said determined peaks.

Claim 31 (previously presented): The method of claim 26, further comprising the steps of:  
pre-computing the frequency representation of the Gold code; and  
storing the pre-computed frequency representation of the Gold code in memory.